# STATE OF THE WATERWAY – 2005





## U. S. Port Rankings 2004



(Millions of Short Tons and % of change from 2003 – 2004 ACOE data)

1 Port of South Louisiana	224.3	+12%	16 Baltimore, MD	47.3	+17.8%
2 Houston, TX	202.0	+5.8%	17 Valdez, AK	46.8	-6.2%
3 New York, NY and NJ	152.4	+4.5%	18 Duluth, MN	45.4	+18.4%
4 Beaumont, TX	91.7	+4.7%	19 Pittsburg, PA	41.0	-1.5%
5 Long Beach, CA	79.9	+15.5%	20 Philadelphia, PA	34.7	+4.4%
6 Corpus Christi, TX	78.9	+2.2%	21 Norfolk, VA	34.2	+9.5%
7 New Orleans, LA	78.0	-7.0%	22 Pascagoula, MS	34.0	+8.6%
8 Huntington-Tristate	77.3	4%	23 Freeport, TX	33.9	+11.0%
9 Texas City, TX	68.3	+11.4%	24 ST. Louis, MO	33.4	+3.0%
10 Baton Rouge, LA	56.9	-7.1%	25 Portland, OR	30.0	+12.0%
11 Mobile, AL	56.7	+13%			
12 Lake Charles, LA	55.2	+3.5%	29 Port Arthur, TX	27.6	+1.5%
13 Plaquemines, LA	54.5	-2.6%	62 Galveston, TX	8.1	+7.5%
14 Los Angeles, CA	51.4	+.1%			
15 Tampa, FL	48.3	+.1%			

#### VTS MOVEMENTS – 2005

Tug/Tow 121,778 +5.1%

Ships 22,139 +12%

Other 15,636 +5.61%

Public 1,247 +72%

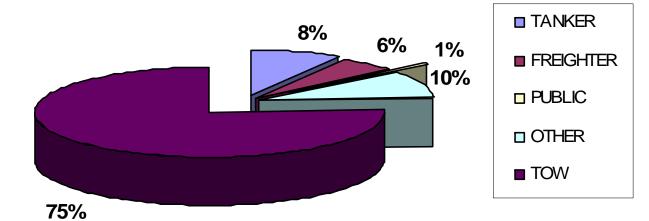
Total Users 160,799 +6.5%

**Ferries** 107,777

Total w/Ferries 268,577

## TRANSIT SUMMARY – 2005





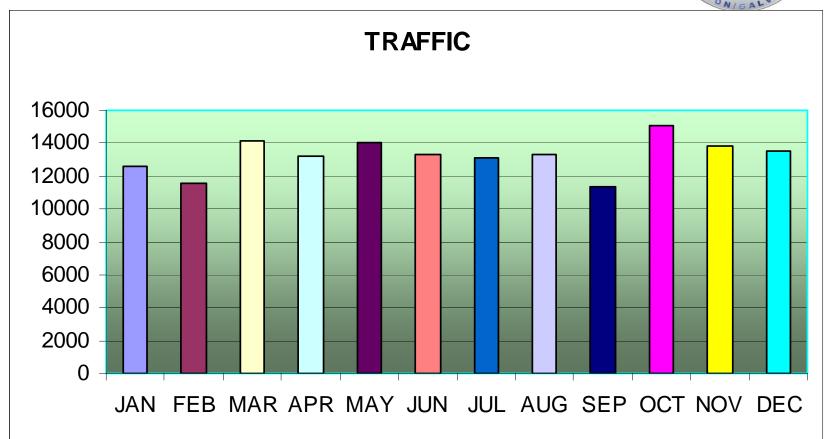
#### **2005 TYPICAL DAY IN THE VTSA**



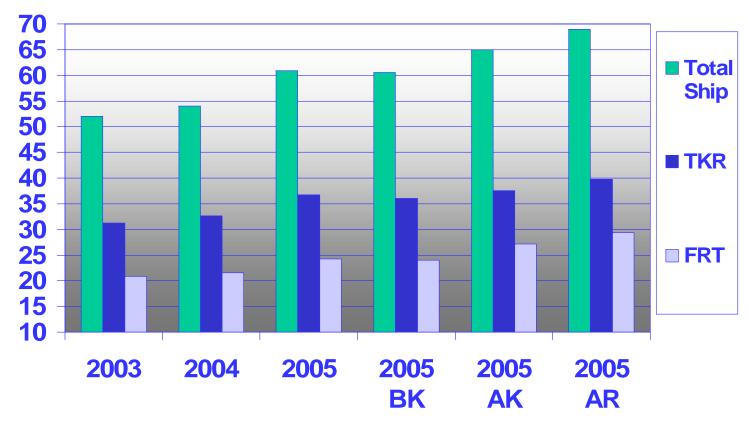
<b>AVG</b>		<b>HIGH</b>
36.2	TANKER TRANSITS	57
24.4	FREIGHTER TRANSITS	39
334	TOW TRANSITS	437
3.4	PUBLIC VESSEL TRANSITS	16
295	FERRY TRANSITS	315
43	OSV / OTHER TRANSITS	111
13.5	CDC TRANSITS	26

# Traffic By Month





#### Rita/Katrina- SHIP TRAFFIC 2003 - 2005



IN 2005 BEFORE KATRINA AUG 23/05, 60.5 • avg.

IN 2005 AFTER KATRINA AUG 31/05, 65 avg.

IN 2005 AFTER RITA SEPT 28/05, 69 avg.

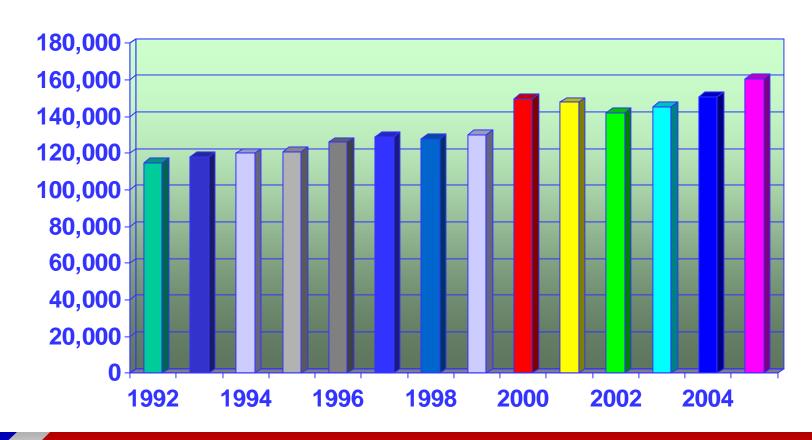
2005 % Increase from BK to AK = 7.5%

2005 % Increase from BK to AR = 14%

Increase from 2003 to 2004 was 4%

## 1992 - 2005 TRANSITS

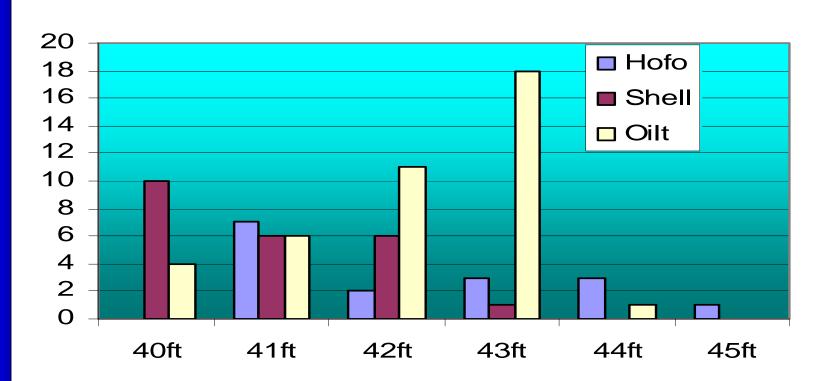




## Deep Draft Entry







#### **INCIDENT SUMMARY – 2005**



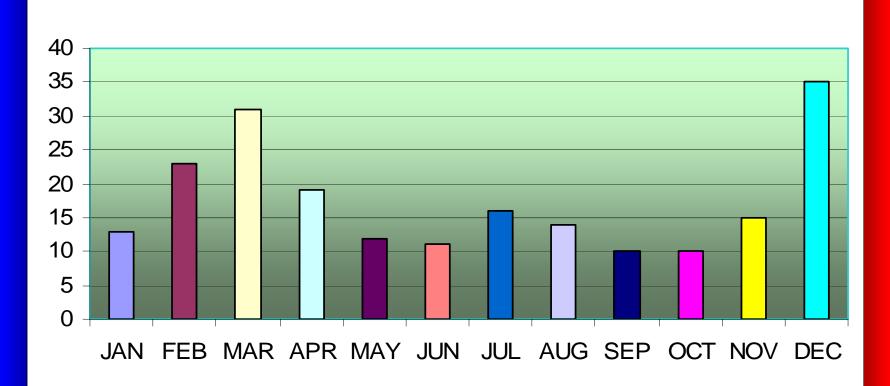
#### **205 INCIDENTS (196 for 04)**

- ➤ 62 VESSEL CASUALTIES 0%
- ➤ 70 GROUNDINGS +30%
- ➤ 47 MISCELLANEOUS +2%
  - 5 Barges Adrift, 4 Pollution Incidents, Car in the Water, 21 Wake Damage
- > 7 COLLISIONS -50%
- ➤ 16 ALLISIONS -5.8%
- > 3 MDA 0%

# Incidents By Month



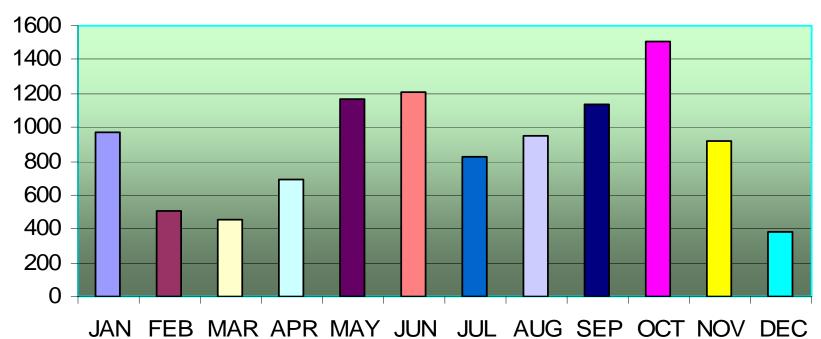
#### **INCIDENTS**



## Ratio







## MAJOR INCIDENTS – 2005



- ➤ Vehicle stopped on SSB observed throwing object off-8 hrs shutdown 2/20/05
- ➤ David C Devall sinks LT 53/54 Channel impacted 73 hrs for SAR and salvage 4/4/05
- ➤ Mathew B sank while conducting bunker in Anchorage. Anchorage impacted for 3 days during salvage 5/8/05

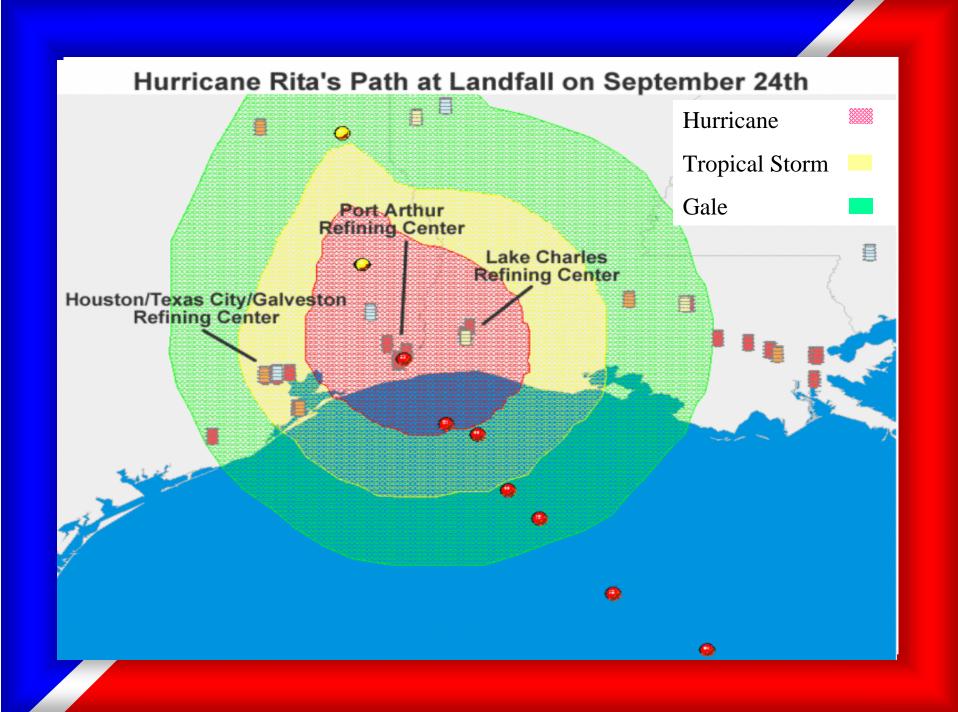
#### MAJOR INCIDENTS – 2005



- ➤ T/V Texas Gator sunk in the vicinity of FHB. Channel restricted for 3 days during event and salvage operations (6/14)
- ➤ Suspicious package at Oiltanking Barge Dock. Channel restricted for several hours. (6/30)
- Suspicious package on Galveston Ferry. Security zone established. (9/25)

## Hurricane Rita

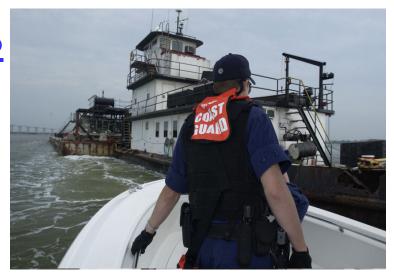
- <u>9/22 1400</u> Port closed, VTC equipment powered down and personnel evacuated.
- <u>9/24 1000</u> VTC personnel back on scene and begin powering up and assessing damage
- <u>9/25 0900</u> Survey boats at various locations conducting surveys (52 Aids reported Discrepant)
- 9/26 0130 Local Transits of light boats begin
- 9/26 0530 Day light transit (35ft) begin. ICW remains closed East of MM 350
- <u>9/29 1215</u> Channel open to project depth.



## PORT SECURITY



- >MARSEC 2
  - 2 MDA maritime related incidents
- > CDC MOVEMENTS
  - **4832 MOVEMENTS**,
  - 13.5 PER DAY
- > SECURITY ZONE INCURSIONS - 78

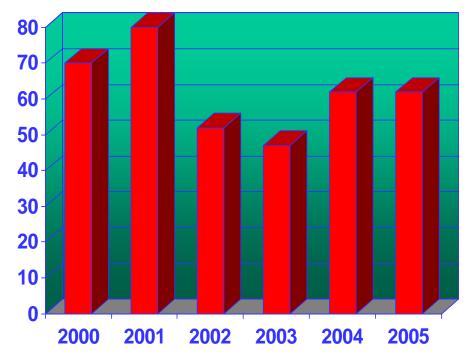


• 1 INCURSION EVERY 4.5 DAYS

## 2005 VESSEL CASUALTIES



- ➤ 62 TOTAL VSL CASUALTIES 0%
  - 37 SHIP
  - 24 TOW
- ➤ 1 VSL CASUALTY
  PER 2,593 VSL
  TRANSITS
- ➤ 1VSL CASUALTY PER 2,187 IN 2004



#### 2005 SHIP CASUALTIES



- >37 TOTAL SHIP CASUALTIES
  - 60% Propulsion Failures
  - 8 % Steering
- ➤1 Ship Casualty per <u>598</u> Transits in 05
- ➤1 Ship Casualty per <u>506</u> Transits in 04

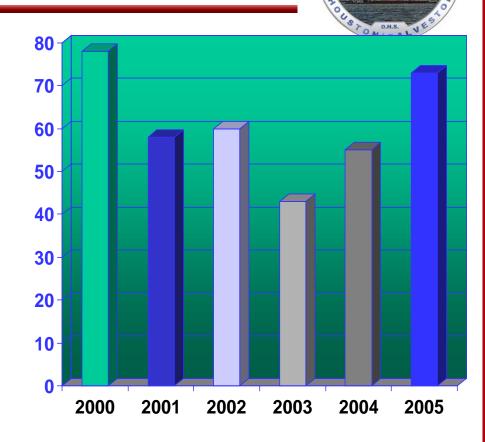
## 2005 TOW CASUALTIES

- >24 TOTAL TOW CASUALTIES
  - 45 % steering related
  - 25% loss of propulsion
- ➤ 1 Tow Casualty per <u>5,074</u> Transits in 05
- ► 1 Tow Casualty per <u>5,035</u> Transits in 04



### **2005 GROUNDINGS**

- > 70 TOTAL GROUNDINGS +33%
  - 58 TOW GROUNDINGS
    - o 1 PER <u>2,100</u> TOW TRANSITS
    - o 19% INCREASE FROM '04
  - 12 SHIP GROUNDINGS
    - o 1 PER <u>2,013</u> SHIP TRANSITS
    - o 100% INCREASE FROM '04

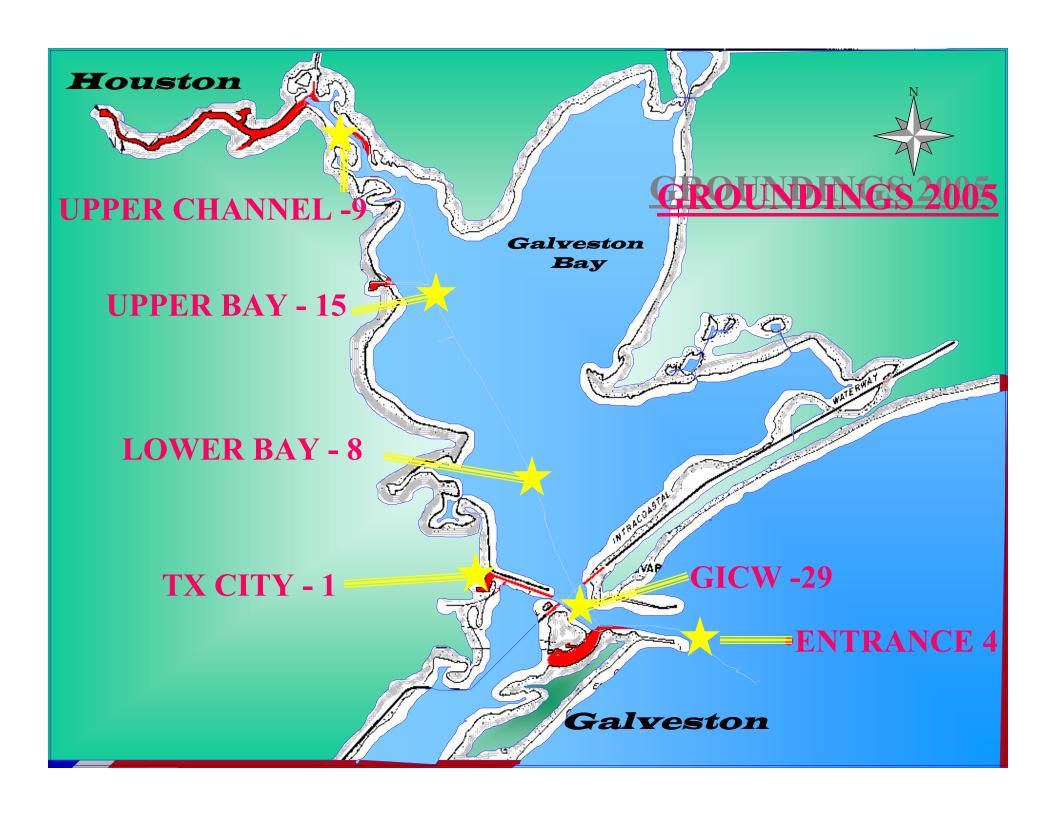


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#### 2005 GROUNDINGS



- > 58 TOTAL TOW GROUNDINGS
  - 29 GICW AREA +45%
  - 8 LOWER BAY (ICW-REDFISH) +33%
  - 14 UPPER BAY (REDFISH-MP) +19% (7 Bayp area)
  - 7 UPPER CHANNEL -14%
- ➤ 12 TOTAL SHIP GROUNDINGS (+100%)
  - 4 Entrance Channel, 2 Anchorage, 2 Dockside, 1 upper bay, 1 Texas City, 1Bayp, 1 Lt 70



## **GROUNDINGS 05**



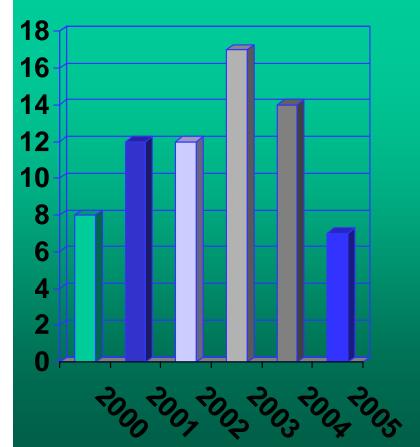
#### > REPORTED CAUSAL FACTORS

- OPERATOR ERROR 27%
- CURRENT 21%
- TRAFFIC DENSITY 21%
- WIND 10%
- Other 20%
  - Shoaling, AtoN, Mechanical

#### 2005 COLLISIONS

HOUSTON TRAFFIC"

- > 7 COLLISIONS 50% improvement over 04
  - 1 SHIP/TOW
  - 3 TOW/TOW
  - 1 SHIP/SHIP
  - 1 OSV/REC BOAT
  - 1 TOW/DREDGE
- ➤ 1 TOW COLLISION PER 24,356 TRANSITS
  - 173% improvement over 04
- ➤ 1 SHIP COLLISION PER 11,069 TRANSITS
  - 500% improvement over 04

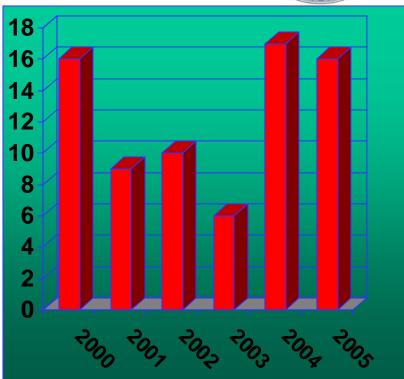


### **2005 ALLISIONS**

\*\*HOUSTON TRAFFICH >

- ➤ 16 ALLISIONS 7% improvement over 04
  - ➤ 12 INVOLVING TOWS
    1 PER 10,148 TOW TRANSITS
  - ➤ 4 INVOLVING SHIPS

    1 PER <u>5,535</u> SHIP TRANSITS

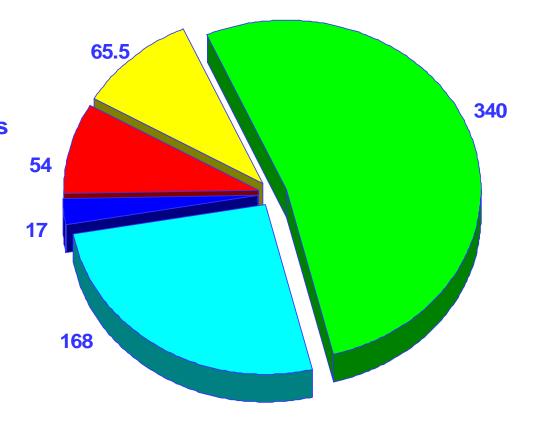


## 2005 CHANNEL CLOSURES

Reported in hours

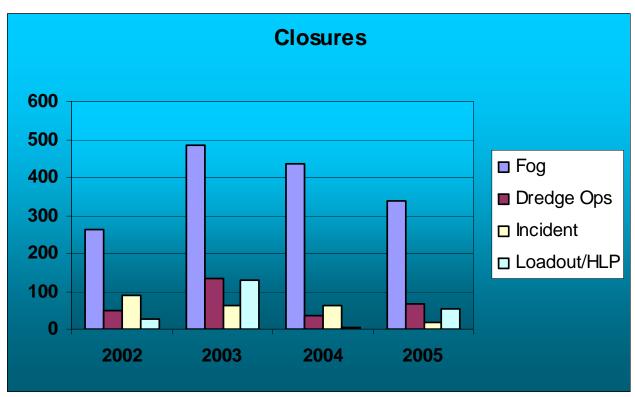


- Loading Operations
- **Incident Related**
- **Dredge Operations**
- **Fog- Bar Closure**
- Rita



# HISTORICAL CHANNEL CLOSURES

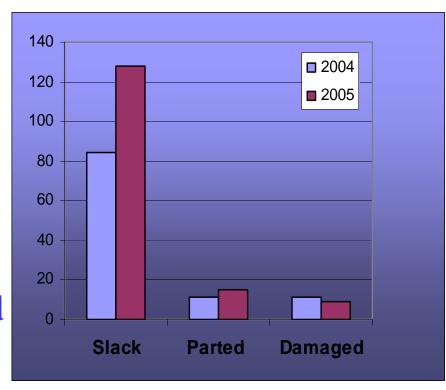




# Reports of Unsafe Moorings



- Increase of 51%
- More Awareness
   Due to Larger Ships
- 63% of docks above Shell
- Additional information is needed
- Continue outreach and facility assessment



#### **ATON KNOCKDOWNS - 2005**



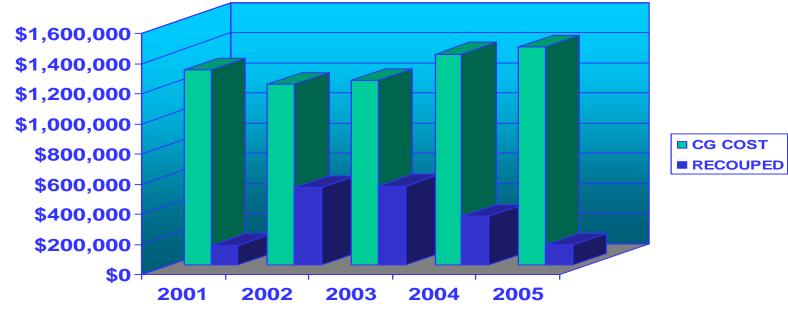
- ➤ 36 SELF-REPORTED KNOCKDOWNS (16.7% OF TOTAL FY '05 KNOCKDOWNS)
  - 2 BELOW HSC LT 40 (5.6%)
  - 5 BTWN HSC LTS 41-70 (13.9%)
  - 11 BTWN HSC LTS 71-100 (30.5%)
  - 13 ABOVE HSC LT 100 (36%)
  - 5 REST OF VTSA (13.9%)
- > LEADING CAUSES
  - WIND AND CURRENT (49%)
  - TRAFFIC DENSITY (47%)



## **ATON KNOCKDOWNS 05**

(COST/RECOUPMENT BREAKDOWN)





Since Oct 05- \$808,000

Total Cost Per Aid Has Doubled in FY 06

### **VTS MILESTONES - 2005**





- > Implemented PAWSS
- ➤ Implemented AIS
- Test PCT concept with Rita
- Local Project Rep for Offshore AIS
- Targeting absorbed in VTC
- ➤ Became Sector 12/15/05

#### **CURRENT PROJECTS**



- ► HOGANSAC and Industry Partnerships:
  - Navigation Operations
  - Bridge Allision Prevention
  - Navigation Technology
  - Aids to Navigation Knockdown
  - Deepdraft Entry Facilitation
  - Video Feed Sharing
    - POH, SHELL, LBC, Texas City

### ON THE HORIZON





- ➤ Offshore Monitoring
- Increased Aids to
  Navigation
  Monitoring
- Increase efficiency of Targeting/Boarding Process

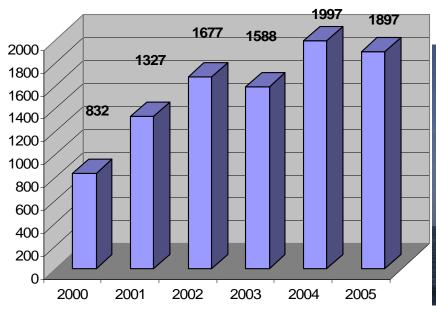
### VTS Contact Information



- > CDR Jerry Torok, Waterways Management
  - (713) 671-5164
- > Steve Nerheim, Director of Operations
  - (713) 678-9000 Snerheim@vtshouston.uscg.mil
- > LT Ben Morgan, Operations Officer
  - (713) 671-5155 Bmorgan@vtshouston.uscg.mil
- ➤ Vessel Traffic Center, Watch Supervisor 24hrs
  - (713) 671-5103 vtshouws@vtshouston.uscg.mil
- > Targeting and Offshore Approaches
  - (713) 678-9009
- **≻ VTS Webpage**
  - www.uscg.mil/d8/vts/houston-galveston

#### ANCHORAGE MANAGEMENT



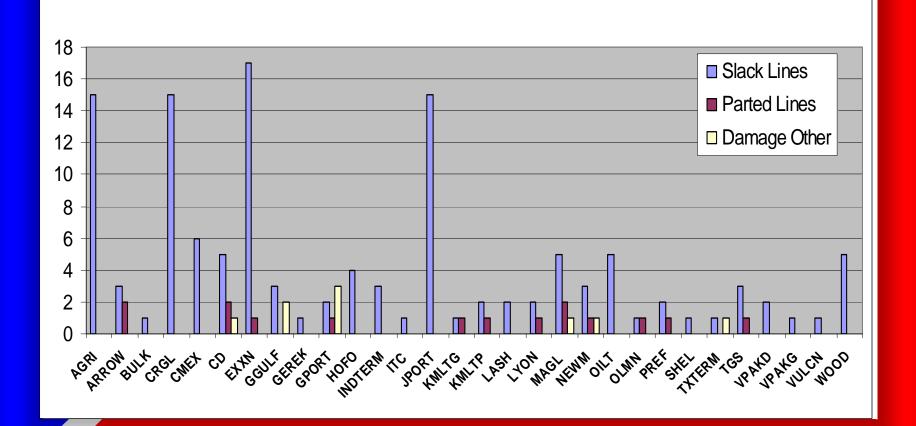




- ➤1,897 VESSELS USED ANCHORAGES IN 2005
- ▶5% DECREASE FROM 2004

# 2005 Moorings





## 2004 Moorings



